# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)
Wireless Telecommunications Bureau seeks comment on petitions regarding the use of signal boosters and other signal amplification techniques used with wireless services	) ) WT Docket No. 10-4 ) Released Jan 6, 2010 ) )

### NOTICE OF EXPARTE COMMUNICATION MILLARD/RAINES PARTNERSHIP ("SMART BOOSTER")



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Submitted via ECFS: September 21, 2010

# EX PARTE VIA ELECTRONIC FILING

Ms. Marlene Dortch Secretary Federal Communications Commission 445 12th Street SW Washington DC 20554

Re: Petitions Regarding the Use of Signal Boosters and Other Signal Amplification Techniques Used with Wireless Services; WT Docket No. 10-4

Dear Ms. Dortch:

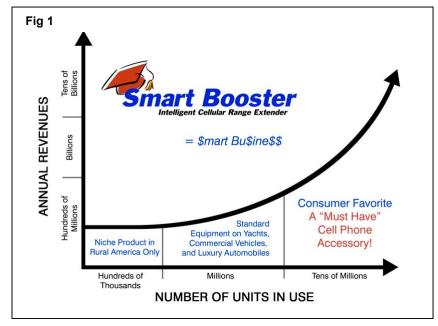
On Monday, September 20, 2010, Dr. Jeremy K. Raines, P.E., and Michael Millard of Smart Booster met with Roger Noel, Joyce Jones, and Moslem Sawez from the Wireless Telecommunications Bureau, Bruce Romano from the Office of Engineering and Technology, Kathy Berthot, from the Enforcement Bureau and Brian Butler from the Public Safety and Homeland Security Bureau to discuss signal booster issues raised in this proceeding.

Smart Booster made arguments consistent with its previous presentations in the docket, as well as the topics raised below:

### Intelligent Boosters Are Big Revenue Producers

Either the carriers or an enterprising third party stands to profit handsomely from the sale of intelligent boosters. The record demonstrates sales to date of at least 2 million boosters in the United States. What happens when boosters become popular with the general public and become mainstream accessories? We anticipate that tens of millions of boosters will be in circulation throughout the country, including both rural and urban areas. The recurring annual revenue from selling and maintaining those devices will total many billions, if not tens of billions of dollars.

Figure 1 shows the anticipated revenue as intelligent boosters become increasingly popular with the general public.



### Public Domain Information Is Sufficient for Intelligent Boosters

The above section describes a made-to-order opportunity for the carriers; however, if they choose not to take advantage of this opportunity, then an enterprising third party can produce intelligent boosters independently. There is sufficient information about signal coverage in the public domain to design and construct a reliable intelligent booster. One example of that information is the 32dBu contours provided by the carriers to the Commission. Of course, if the carriers do choose to embrace intelligent boosters, then they can optimize the memory to best suit their networks.

### Tower Locations and Licensed Frequencies

A major carrier has expressed concerns to Smart Booster that the disclosure of tower locations and licensed frequencies harms competitiveness and threatens national security. The evidence clearly shows that this is patently absurd. To wit, attached are two examples, readily obtained from the public domain, of information that the carrier asserts is proprietary and affects national security.

Frequencies licensed to each carrier, in each market, are available at the following FCC web site: <a href="http://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp">http://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp</a>

### Dynamic Control of Boosters Is a Seriously Flawed Concept

The Commission inquired about the consequences of providing dynamic control of boosters as requested by the carriers. That is, a booster would be uniquely addressable and controllable by the network. In other words, the booster would have all the hardware and software of a cell phone except for an earpiece, a microphone and a keypad. It would be in constant standby mode for incoming call, but would unable to initiate calls. Could this possibly work?

We firmly believe think the answer is "No" for many reasons, including:

- 1. Network capacity is diminished by each booster so equipped.
- 2. The expense of adding all the hardware and software described above elevates the cost beyond the reach of most consumers.
- 3. An independently addressable and controllable booster may be handed off to network resources different from those providing service to the cell phone. It is not clear that a single call can be administered using disparate network resources, irrespective of address and control capabilities.
- 4. This configuration creates an endless loop that hunts for the power output requested by the network. As the handset is instructed to increase power, more power than expected is received due to the booster, which simultaneously responds to the same request. Consequently, both the cell phone and the booster receive simultaneous requests to decrease power. The constantly alternating up and down power requests are echoed in all other devices on the network. In that sense, the entire network becomes unstable.

### The FCC Must Act Now

It is clear from the above discussion that there may soon be many tens of millions of boosters in operation, and if they are not intelligent boosters, then wireless networks will increasingly suffer from interference and dropped calls. Therefore, it is essential that the Commission take an active role in promoting the right kind of booster for the future.

Doing nothing is going to exacerbate problems in the future. Doing nothing means that carrier cell sites continue to shrink in their design coverage due to the cumulative broadband noise generated by boosters presently in commerce.

Outlawing all boosters clearly deprives the public of essential and vital communications, including law enforcement and emergency services.

Clearly, the only remaining option is to enact regulations that allow intelligent boosters to operate on the wireless networks and that remove harmful boosters from them. We realize this may be a painful choice for the Commission, given the recalcitrance of some carriers to endorse intelligent boosters; however, it is the only responsible option that serves the public interest.

Respectfully submitted,

Jeremy K. Raines, Ph.D., P.E. Michael Millard

By: Michael & Walke

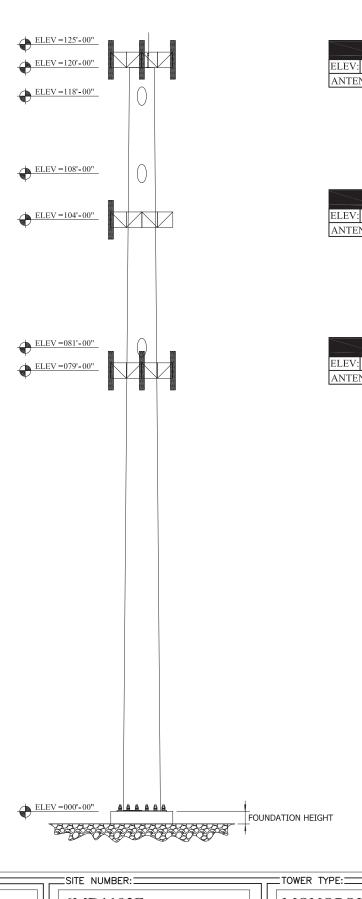
Michael Millard 265 S. Federal Hwy #324 Deerfield Beach, FL 33441 Jeremy K. Raines, Ph.D., P.E.

By: Jeremy Klaines, Ph.D., F.E.

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Dated: September 21, 2010.

VIA: ECFS.

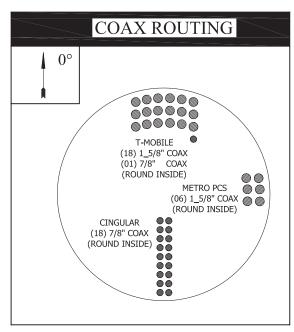




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	CING	ULAR ANT	ΓENNAS	
ELEV:	079'-00"	QTY PER FA	CE (A,B,C):	3,3,3
ANTE	NNA TYPE:	PANEL.	5°, 1	15°, 240°

LIGHTING
TOP LIGHT: NO
SIDE LIGHTS NO OTY:0



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FCC NUMBER:

**NONE** 

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120'-00"

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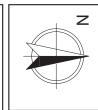
0'-06"

6'-00"

TOTAL HEIGHT:

10000

126'-06"



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